Webster UNIVERSITY

The School of Business & Technology

Course Syllabus

Course	**HLTH 5100: Statistics for Health Administration**
Term	Fall 2, 2009
Instructor	Name: Fred Belanger Phone: 568-5717 Email: fred.belanger@us.army.mil
Catalog Description	This course introduces the use of statistical analysis in health administration. The course emphasizes development of the basic methods and underlying concepts of statistics that are used in management decision making and health services research which include: descriptive statistics, probability sampling, hypothesis testing, forecasting methods, and nonparametric statistics. Statistical applications in epidemiology and health services research are presented.
Prerequisites	None
Course Level Learning Outcomes	• The student will be able to contrast descriptive and inferential statistics • The student will know when to use non-parametrics • The student will be able to test hypotheses • The student will be able to evaluate basic research • The student will be able to apply statistical methods to management and research questions
Materials	*STATISTICS,* A First Course (current edition) Sanders, Donald H., McGraw Hill Inc. New York, NY
Grading	Exam 1 — 50% Exam 2 — 50% Total — 100% **The GRADUATE catalog provides these guidelines and grading options:** • **A/A–** Superior graduate work • **B+/B/B–** Satisfactory graduate work • **C** Work that is barely adequate as graduate-level performance • **CR** Work that is performed as satisfactory graduate work (B– or better). A grade of "CR"is reserved for courses designated by a department, involving internships, a thesis, practicums, or specified courses. • **F** Work that is unsatisfactory • **I** Incomplete work • **ZF** An incomplete which was not completed within one year of the end of the course. ZF is treated the same as an F or NC for all cases involving G.P.A., academic warning, probation, and dismissal. • **IP** In progress • **NR** Not reported • **W** Withdrawn from the course

Activities	Statistical problems, cases, and critical analyses of published research.
Policy Statements: **University Policies**	University policies are provided in the current course catalog and course schedules. They are also available on the university website. This class is governed by the university's published policies. The following policies are of particular interest: **Academic Honesty** The university is committed to high standards of academic honesty. Students will be held responsible for violations of these standards. Please refer to the university's academic honesty policies for a definition of academic dishonesty and potential disciplinary actions associated with it. **Drops and Withdrawals** Please be aware that, should you choose to drop or withdraw from this course, the date on which you notify the university of your decision will determine the amount of tuition refund you receive. Please refer to the university policies on drops and withdrawals (published elsewhere) to find out what the deadlines are for dropping a course with a full refund and for withdrawing from a course with a partial refund. **Special Services** If you have registered as a student with a documented disability and are entitled to classroom or testing accommodations, please inform the instructor at the beginning of the course of the accommodations you will require in this class so that these can be provided. **Disturbances** Since every student is entitled to full participation in class without interruption, disruption of class by inconsiderate behavior is not acceptable. Students are expected to treat the instructor and other students with dignity and respect, especially in cases where a diversity of opinion arises. Students who engage in disruptive behavior are subject to disciplinary action, including removal from the course. **Student Assignments Retained** From time to time, student assignments or projects will be retained by The Department for the purpose of academic assessment. In every case, should the assignment or project be shared outside the academic Department, the student's name and all identifying information about that student will be redacted from the assignment or project. **Contact Hours for this Course** It is essential that all classes meet for the full instructional time as scheduled. A class cannot be shortened in length. If a class session is cancelled for any reason, it must be rescheduled.

Course Policies	Cheating and plagiarism Of course, students are expected to do their own work. Students who claim that someone else's work is theirs may face disciplinary action. Plagiarism can be avoided simply by the use of quotation marks when quoting and citation when paraphrasing someone else's work. Absenteeism Student's who miss more than one class will have to make up additional work. Student's who miss more than two classes may be advised to drop the course or may have their grade lowered commensurately. Students will conform to all University Policies. This syllabus may be revised or changed without prior notice by the instructor.
Weekly Schedule	Week 1 Class admin; class roster; course syllabus Lecture: Intro to Stats, Use and Terminology Assignments: Read chapters 1 and 2 Week 2 Class admin; review previous problems Lecture: Frequency distributions, central tendency and dispersion Assignments: Read chapters 3 and 4 Week 3 Class admin; review previous problems Lecture: Probability distributions and sampling concepts Assignments: Read chapters 5 and 6 Week 4 Class admin; review previous problems Lecture: Estimating population measures Assignments: Read chapter 7 Week 5 Class admin; review previous problems Lecture: Review for Midterm Exam Assignments: **MIDTERM EXAM** chapters 1 thru 7 Week 6 Class admin; review Midterm test results Lecture: Test of hypothesis, one and two sample means Assignments: Read chapters 8 and 9 Week 7 Class admin; review previous problems Lecture: ANOVA and linear regression Assignments: Read chapters 10 and 12

	Week 8 Class admin; review previous problems Lecture: non-parametric statistics Assignments: Read chapter 13 Week 9 Class admin; review previous problems Lecture: Review for Final Exam Assignments: **FINAL EXAM** chapters 8, 9, 10, 12, and 13
Additional Information	None